Amendments to the Claims

1. (currently amended)   A method of structuring interactive content for mobile devices, comprising the steps of:

[[(1)]] determining layout and rendering parameters based on mobile device information;

[[(2)]] parsing requested content into a ~~mutable~~ document having a format based on at least said layout and rendering parameters;

[[(3)]] generating ~~mutable~~ document content on an object-by-object basis from said document; [[and]]

[[(4)]] generating a ~~mutable~~ document table based on said object-by-object basis for said ~~mutable~~ document content;

serializing said document content into a content stream according to said object-by-object basis;

serializing said document table into said content stream according to said object-by-object basis; and

transmitting said content stream to a mobile device;

wherein the serialized document table contains at least one pointer to object data in the content stream.

2. (original)   The method of claim 1, wherein said object-by-object basis corresponds to distinguishable pieces of said request content.

3. (currently amended)   The method of claim 1, whereby said ~~mutable~~ document table provides points of reference to the objects of said ~~mutable~~ document content.

4. (currently amended)   The method of claim 1, further comprising the steps of:

[[(5)]] compressing said ~~mutable~~ document content according to said object-by-object basis; and

[[(6)]] encrypting said ~~mutable~~ document content according to said object-by-object basis.

5-6. (canceled)

7. (currently amended)   The method of claim [[5]] 1, further comprising the step of:

[[(9)]] storing said content stream on a mobile device.

8. (currently amended)   The method of claim [[5]] 1, further comprising the step of:

[[(9)]] modifying an object of said content stream, wherein said object corresponds to distinguishable pieces of said request content.

9. (currently amended)   The method of claim 8, wherein [[step (9)]] modifying step comprises the steps of:

(a)   accessing an object pointer in said ~~mutable~~ document table within said content stream, wherein said object pointer contains a vtable pointer for accessing instance methods and an attribute pointer for accessing said object within said content stream;

(b)   copying said object to a new memory space for modification;

(c)   altering said object with said instance methods; and

(d)   updating said attribute pointer of said object pointer to the memory space of said object[[ed]] that has been altered.

10. (currently amended)   A system of structuring interactive content for mobile devices, comprising:

means for determining layout and rendering parameters based on mobile device information;

means for parsing requested content into a ~~mutable~~ document having a format based on at least said layout and rendering parameters;

first means for generating ~~mutable~~ document content on an object-by-object basis from said ~~mutable~~ document; [[and]]

second means for generating a ~~mutable~~ document table based on said object-by-object basis for said ~~mutable~~ document content;

first means for serializing said document content into a content stream according to said object-by-object basis;

second means for serializing said document table into said content stream according to said object-by-object basis; and

means for transmitting said content stream to a mobile device;

wherein the serialized document table contains at least one pointer to object data in the content stream.

11. (original) The system of claim 10, wherein said object-by-object basis corresponds to distinguishable pieces of said request content.

12. (currently amended)   The system of claim 10, whereby said ~~mutable~~ document table provides points of reference to the objects of said ~~mutable~~ document content.

13. (currently amended)   The system of claim 10, further comprising:

means for compressing said ~~mutable~~ document content according to said object-by-object basis; and

means for encrypting said ~~mutable~~ document content according to said object-by-object basis.

14-15. (canceled)

16. (currently amended)   The system of claim [[14]] 10, further comprising:

means for storing said content stream on a mobile device.

- 6 -

KLOBA *et al.*
Appl. No. 09/705,927

17. (currently amended)   The system of claim [[14]] 10, further comprising:

means for modifying an object of said content stream, wherein said object corresponds to distinguishable pieces of said request content.

18. (currently amended)   The system of claim 17, wherein means for modifying comprises:

means for accessing an object pointer in said ~~mutable~~ document table within said content stream, wherein said object pointer contains a vtable pointer for accessing instance methods and an attribute pointer for accessing said object within said content stream;

means for copying said object to a new memory space for modification;

means for altering said object with said instance methods; and

means for updating said attribute pointer of said object pointer to the memory space of said object[[ed]] that has been altered.

19. (currently amended)   A computer program product comprising a computer usable medium having computer readable program code means embodied in said medium for causing an application program to execute on a computer that structures interactive content for mobile devices, said computer readable program code means comprising:

a first computer readable program code means for causing a computer to determine layout and rendering parameters based on mobile device information;

a second computer readable program code means for causing a computer to parse requested content into a ~~mutable~~ document having a format based on at least said layout and rendering parameters;

a third computer readable program code means for causing a computer to generate ~~mutable~~ document content on an object-by-object basis from said ~~mutable~~ document; [[and]]

- 7 -

KLOBA *et al.*
Appl. No. 09/705,927

a fourth computer readable program code means for causing a computer to generate a ~~mutable~~ document table based on said object-by-object basis for said ~~mutable~~ document content;

a fifth computer readable program code means for causing a computer to serialize said document content into a content stream according to said object-by-object basis;

a sixth computer readable program code means for causing a computer to serialize said document table into said content stream according to said object-by-object basis; and

a seventh computer readable program code means for causing a computer to transmit said content stream to a mobile device;

wherein the serialized document table contains at least one pointer to object data in the content stream.

20. (original)   The computer program product of claim 19, wherein said object-by-object basis corresponds to distinguishable pieces of said request content.

21. (currently amended)   The computer program product of claim 19, whereby said ~~mutable~~ document table provides points of reference to the objects of said ~~mutable~~ document content.

22. (currently amended)   The method of claim 19, further comprising:

~~a fifth~~ an eighth computer readable program code means for causing a computer to compressing said ~~mutable~~ document content according to said object-by-object basis; and

a [[sixth]] ninth computer readable program code means for causing a computer to encrypting said ~~mutable~~ document content according to said object-by-object basis.

Atty. Dkt. No. 1933.0010009

23-24. (canceled)

25. (currently amended)   The computer program product of claim [[23]] 19, further comprising:

an eighth [[tenth]] computer readable program code means for causing a computer to store said content stream on a mobile device.

26. (currently amended)   The computer program product of claim [[23]] 19, further comprising:

an eighth an eleventh computer readable program code means for causing a computer to modify an object of said content stream, wherein said object corresponds to distinguishable pieces of said request content.

27. (currently amended)   The computer program product of claim 26, wherein said eleventh eighth computer readable program code means comprises:

a ninth twelfth computer readable program code means for causing a computer to access an object pointer in said mutable document table within said content stream, wherein said object pointer contains a vtable pointer for accessing instance methods and an attribute pointer for access said object within said content stream;

a tenth thirteenth computer readable program code means for causing a computer to copy said object to a new memory space for modification;

an eleventh fourteenth computer readable program code means for causing a computer to alter said object with said instance methods; and

a twelfth fifteenth computer readable program code means for causing a computer to update said attribute pointer of said object pointer to the memory space of said object[[ed]] that has been altered.

28. (new)   A method of structuring interactive content for mobile devices, comprising:

determining layout and rendering parameters based on mobile device information;

parsing requested content into a document having a format based on at least said layout and rendering parameters;

generating document content on an object-by-object basis from said document;

generating a document table based on said object-by-object basis for said document content;

compressing said document content according to said object-by-object basis;

encrypting said document content according to said object-by-object basis;

serializing said document content into a content stream according to said object-by-object basis;

serializing said document table into said content stream according to said object-by-object basis for said document, wherein said document content and said document table form said content stream according to said mobile device information; and

modifying an object of said content stream, wherein said object corresponds to distinguishable pieces of said request content, wherein said modifying comprises:

accessing an object pointer in said document table within said content stream, wherein said object pointer contains a vtable pointer for accessing instance methods and an attribute pointer for accessing said object within said content stream,

copying said object to a new memory space for modification,

altering said object with said instance methods, and

updating said attribute pointer of said object pointer to the memory space of said object that has been altered.

29. (new)   A system of structuring interactive content for mobile devices, comprising:

means for determining layout and rendering parameters based on mobile device information;

means for parsing requested content into a document having a format based on at least said layout and rendering parameters;

- 10 -

KLOBA *et al.*
Appl. No. 09/705,927

first means for generating document content on an object-by-object basis from said document;

second means for generating a document table based on said object-by-object basis for said document content;

means for compressing said document content according to said object-by-object basis;

means for encrypting said document content according to said object-by-object basis;

first means for serializing said document content into a content stream according to said object-by-object basis;

second means for serializing said document table into said content stream according to said object-by-object basis for said document, wherein said document content and said document table form said content stream according to said mobile device information; and

means for modifying an object of said content stream, wherein said object corresponds to distinguishable pieces of said request content, wherein means for modifying comprises:

means for accessing an object pointer in said document table within said content stream, wherein said object pointer contains a vtable pointer for accessing instance methods and an attribute pointer for accessing said object within said content stream,

means for copying said object to a new memory space for modification,

means for altering said object with said instance methods, and

means for updating said attribute pointer of said object pointer to the memory space of said object that has been altered.

30. (new)   A computer program product comprising a computer usable medium having computer readable program code means embodied in said medium for causing an application program to execute on a computer that structures interactive content for mobile devices, said computer readable program code means comprising:

a first computer readable program code means for causing a computer to determine layout and rendering parameters based on mobile device information;

a second computer readable program code means for causing a computer to parse requested content into a document having a format based on at least said layout and rendering parameters;

a third computer readable program code means for causing a computer to generate document content on an object-by-object basis from said document;

a fourth computer readable program code means for causing a computer to generate a document table based on said object-by-object basis for said document content;

a fifth computer readable program code means for causing a computer to compressing said document content according to said object-by-object basis;

a sixth computer readable program code means for causing a computer to encrypting said document content according to said object-by-object basis;

a seventh computer readable program code means for causing a computer to serialize said document content into a content stream according to said object-by-object basis;

an eighth computer readable program code means for causing a computer to serialize said document table into said content stream according to said object-by-object basis for said document, wherein said document content and said document table form said content stream according to said mobile device information; and

a ninth computer readable program code means for causing a computer to modify an object of said content stream, wherein said object corresponds to distinguishable pieces of said request content, wherein said ninth computer readable program code means comprises:

a tenth computer readable program code means for causing a computer to access an object pointer in said document table within said content stream, wherein said object pointer contains a vtable pointer for accessing instance methods and an attribute pointer for access said object within said content stream,

a eleventh computer readable program code means for causing a computer to copy said object to a new memory space for modification,

a twelfth computer readable program code means for causing a computer to alter said object with said instance methods, and

a thirteenth computer readable program code means for causing a computer to update said attribute pointer of said object pointer to the memory space of said object that has been altered.